5

10

15

METHOD AND SYSTEM FOR FORMING BALL GRID ARRAY ("BGA") PACKAGES

ABSTRACT OF THE DISCLOSURE

According to one embodiment of the invention, a system for forming ball grid array packages includes a substrate and a stencil engaging a first surface of the substrate. The stencil includes a center region having a first set of generally circular holes formed therein and a first outer region disposed radially outwardly from the center region having a second set of generally circular holes formed therein. The diameter of each of the generally circular holes of the second set is greater than the diameter of each of the generally circular holes of the first set. The system further includes a solder paste disposed outwardly from the stencil and a squeegee operable to spread the solder paste over the stencil to fill the first and second set of generally circular holes, thereby creating a plurality of solder paste regions.